



# TORQ Analysis of Prepress Technicians and Workers to Ophthalmic Laboratory Technicians

## INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Prepress Technicians and Workers	51-5022.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Ophthalmic Laboratory Technicians	51-9083.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

## OUTPUT SECTION:

Grand TORQ:

80

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	78	Level	84	Level	77

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Manual Dexterity	52	20	79	Service Orientation	59	13	75	No Knowledge Upgrades Required!			
Finger Dexterity	55	21	72	Repairing	53	12	70				
Arm-Hand Steadiness	55	16	82	Instructing	63	4	78				
Written Comprehension	50	20	62	Reading Comprehension	59	1	80				
Number Facility	45	21	50								
Near Vision	61	12	70								
Control Precision	44	11	65								
Deductive Reasoning	42	13	52								
Problem Sensitivity	40	10	55								
Information Ordering	45	5	60								
Wrist-Finger Speed	37	5	55								

LEVEL and IMPT (IMPORTANCE) refer to the Target Ophthalmic Laboratory Technicians. GAP refers to level difference between Prepress Technicians and Workers and Ophthalmic Laboratory Technicians.

## ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Prepress Technicians and Workers	Ophthalmic Laboratory Technicians	Importance
-------------	----------------------------------	-----------------------------------	------------



Arm-Hand Steadiness	39	55	82
Manual Dexterity	32	52	79
Finger Dexterity	34	55	72
Near Vision	49	61	70
Control Precision	33	44	65
Written Comprehension	30	50	62
Information Ordering	40	45	60
Problem Sensitivity	30	40	55
Wrist-Finger Speed	32	37	55
Deductive Reasoning	29	42	52
Number Facility	24	45	50

## Skill Level Comparison - Abilities with importance scores over 69

Description	Prepress Technicians and Workers	Ophthalmic Laboratory Technicians	Importance
Active Listening	53	53	85
Reading Comprehension	58	59	80
Mathematics	50	47	80
Instructing	59	63	78
Coordination	64	44	76
Service Orientation	46	59	75
Speaking	58	42	74
Writing	56	42	71
Repairing	41	53	70
Time Management	59	53	70

## Knowledge Level Comparison - Knowledge with importance scores over 69

Description	Prepress Technicians and Workers	Ophthalmic Laboratory Technicians	Importance
-------------	----------------------------------	-----------------------------------	------------

## Experience &amp; Education Comparison

Related Work Experience Comparison			Required Education Level Comparison		
Description	Prepress Technicians and Workers	Ophthalmic Laboratory Technicians	Description	Prepress Technicians and Workers	Ophthalmic Laboratory Technicians
10+ years	0%	0%	Doctoral	0%	0%



8-10 years	10%	0%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	22%	1%	Master's Degree	0%	0%
2-4 years	13%	0%	Post-Bachelor Cert	0%	0%
1-2 years	25%	15%	Bachelors	0%	0%
6-12 months	22%	14%	AA or Equiv	23%	9%
3-6 months	2%	0%	Some College	23%	4%
1-3 months	0%	0%	Post-Secondary Certificate	27%	4%
0-1 month	1%	0%	High School Diploma or GED	25%	76%
None	2%	68%	No HSD or GED	0%	4%

## Prepress Technicians and Workers

## Ophthalmic Laboratory Technicians

## Most Common Educational/Training Requirement:

Postsecondary vocational award

Moderate-term on-the-job training

## Job Zone Comparison

## 3 - Job Zone Three: Medium Preparation Needed

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

## 2 - Job Zone Two: Some Preparation Needed

Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.

These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.

Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

## Tasks

## Prepress Technicians and Workers

## Core Tasks

## Generalized Work Activities:

- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Interacting With Computers - Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.
- Organizing, Planning, and Prioritizing Work - Developing specific goals and plans to prioritize, organize, and accomplish your work.

## Ophthalmic Laboratory Technicians

## Core Tasks

## Generalized Work Activities:

- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Making Decisions and Solving Problems - Analyzing information and evaluating results to choose the best solution and solve problems.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.



## Specific Tasks

## Occupation Specific Tasks:

- Activate scanners to produce positive or negative films for the black-and-white, cyan, yellow, and magenta separations from each original copy.
- Analyze originals to evaluate color density, gradation highlights, middle tones, and shadows, using densitometers and knowledge of light and color.
- Arrange and mount typeset material and illustrations into paste-ups for printing reproduction, based on artists' or editors' layouts.
- Correct minor film mask defects with litho tape or opaquing fluid.
- Enter, position, and alter text size, using computers, to make up and arrange pages so that printed materials can be produced.
- Enter, store, and retrieve information on computer-aided equipment.
- Examine finished plates to detect flaws, verify conformity with master plates, and measure dot sizes and centers, using light-boxes and microscopes.
- Examine photographic images for obvious imperfections prior to plate making.
- Examine unexposed photographic plates to detect flaws or foreign particles prior to printing.
- Inspect developed film for specified results and quality, using magnifying glasses and scopes; forward acceptable negatives or positives to other workers or to customers.
- Lower vacuum frames onto plate-film assemblies, activate vacuums to establish contact between film and plates, and set timers to activate ultraviolet lights that expose plates.
- Maintain, adjust, and clean equipment, and perform minor repairs.
- Mix solutions such as developing solutions and colored coating solutions.
- Monitor contact between cover glass and masks inside vacuum frames, in order to prevent flaws resulting from overexposure or light reflection.
- Mount negatives and plates in cameras, set exposure controls, and expose plates to light through negatives in order to transfer images onto plates.
- Operate and maintain a variety of cameras and equipment, such as process, line, halftone, and color separation cameras, enlargers, electronic scanners,

## Specific Tasks

## Occupation Specific Tasks:

- Adjust lenses and frames in order to correct alignment.
- Assemble eyeglass frames and attach shields, nose pads, and temple pieces, using pliers, screwdrivers, and drills.
- Clean finished lenses and eyeglasses, using cloths and solvents.
- Control equipment that coats lenses to alter their reflective qualities.
- Examine prescriptions, work orders, or broken or used eyeglasses in order to determine specifications for lenses, contact lenses, and other optical elements.
- Immerse eyeglass frames in solutions in order to harden, soften, or dye frames.
- Inspect lens blanks in order to detect flaws, verify smoothness of surface, and ensure thickness of coating on lenses.
- Inspect, weigh, and measure mounted or unmounted lenses after completion in order to verify alignment and conformance to specifications, using precision instruments.
- Lay out lenses and trace lens outlines on glass, using templates.
- Mount and secure lens blanks or optical lenses in holding tools or chucks of cutting, polishing, grinding, or coating machines.
- Mount, secure, and align finished lenses in frames or optical assemblies, using precision hand tools.
- Position and adjust cutting tools to specified curvature, dimensions, and depth of cut.
- Remove lenses from molds, and separate lenses in containers for further processing or storage.
- Repair broken parts, using precision hand tools and soldering irons.
- Select lens blanks, molds, tools, and polishing or grinding wheels, according to production specifications.
- Set dials and start machines to polish lenses, or hold lenses against rotating wheels in order to polish them manually.
- Set up machines to polish, bevel, edge, and grind lenses, flats, blanks, and other precision optical elements.
- Shape lenses appropriately so that they can be inserted into frames.

## Detailed Tasks



cameras, enlargers, electronic scanners, and contact equipment.

- Operate and maintain laser plate-making equipment that converts electronic data to plates without the use of film.
- Operate presses to print proofs of plates, monitoring printing quality to ensure that it is adequate.
- Perform close alignment or registration of double and single flats to sensitized plates prior to exposure, in order to produce composite images.
- Perform minor deletions, additions, or corrections to completed plates, on or off printing presses, using tusche, printing ink, erasers, and needles.
- Perform tests to determine lengths of exposures, by exposing plates, scanning line copy, and comparing exposures to tone range scales.
- Place masking paper on areas of plates not covered by positives or negatives, in order to prevent exposure.
- Position and angle screens for proper exposure.
- Position color transparencies, negatives, or reflection copies on scanning drums, and mount drums and heads on scanners.
- Punch holes in light-sensitive plates and insert pins in holes to prepare plates for contact with positive or negative film.
- Remove plate-film assemblies from vacuum frames, and place exposed plates in automatic processors to develop images and dry plates.
- Reposition lamps and adjust aperture controls in order to provide high quality images.
- Scale copy for reductions and enlargements, using proportion wheels.
- Select proper types of plates according to press run lengths.
- Set scanners to specific color densities, sizes, screen rulings, and exposure adjustments, using scanner keyboards or computers.
- Transfer images from master plates to unexposed plates, and immerse plates in developing solutions to develop images.
- Unload exposed film from scanners, and place film in automatic processors to develop images.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- arrange galley setups of type
- assure quality control in printing processes
- clean equipment or machinery
- compute production, construction, or installation specifications

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- attach or mark identification onto products or containers
- cut or grind optical lenses
- examine products or work to verify conformance to specifications
- fabricate components for precision instruments
- fabricate, assemble, or disassemble manufactured products by hand
- lay out machining, welding or precision assembly projects
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain production or work records
- make independent judgment in assembly procedures
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- operate metal or plastic fabricating equipment/machinery
- operate optical manufacturing equipment
- operate paint or coating application production machinery
- perform safety inspections in manufacturing or industrial setting
- plan or organize work
- read blueprints
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- solder metal parts or components together
- test manufactured products or materials
- understand machine setup instructions
- understand technical operating, service or repair manuals
- use electrical or electronic test devices or equipment
- use hand or power tools
- use precision measuring tools or equipment
- use soldering equipment
- use spray paint equipment



- determine film exposure settings
- determine specifications
- develop film or other photographic medium
- distinguish colors
- distinguish details in graphic arts material
- examine products or work to verify conformance to specifications
- fabricate printing plates
- fabricate, assemble, or disassemble manufactured products by hand
- identify color or balance
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- make independent judgment in assembly procedures
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- operate cameras
- operate graphic reproduction equipment
- operate printing equipment/machinery
- operate scanner
- operate video recorders
- paste up materials to be printed
- perform safety inspections in manufacturing or industrial setting
- prepare artwork for camera or press
- process photographic prints
- proofread printed or written material
- read blueprints
- read production layouts
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- set page layout or composition
- set up production equipment or machinery
- strip negatives
- understand technical operating, service or repair manuals
- use color analyzer
- use computer graphics design software
- use computers to enter, access or retrieve data
- use densitometer



- use drafting or mechanical drawing techniques
- use hand or power tools
- use precision measuring tools or equipment

### Labor Market Comparison

Description	Prepress Technicians and Workers	Ophthalmic Laboratory Technicians	Difference
Median Wage	\$ 30,620	\$ 26,810	\$( 3,810)
10th Percentile Wage	\$ 20,010	\$ 23,190	\$ 3,180
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 35,650	\$ 28,860	\$( 6,790)
90th Percentile Wage	\$ 39,160	\$ 31,370	\$( 7,790)
Mean Wage	\$ 30,260	\$ 27,370	\$( 2,890)
Total Employment - 2007	300	N/A	N/A
Employment Base - 2006	303	N/A	N/A
Projected Employment - 2016	249	N/A	N/A
Projected Job Growth - 2006-2016	-17.8 %	0.0 %	17.8 %
Projected Annual Openings - 2006-2016	5	0	-5

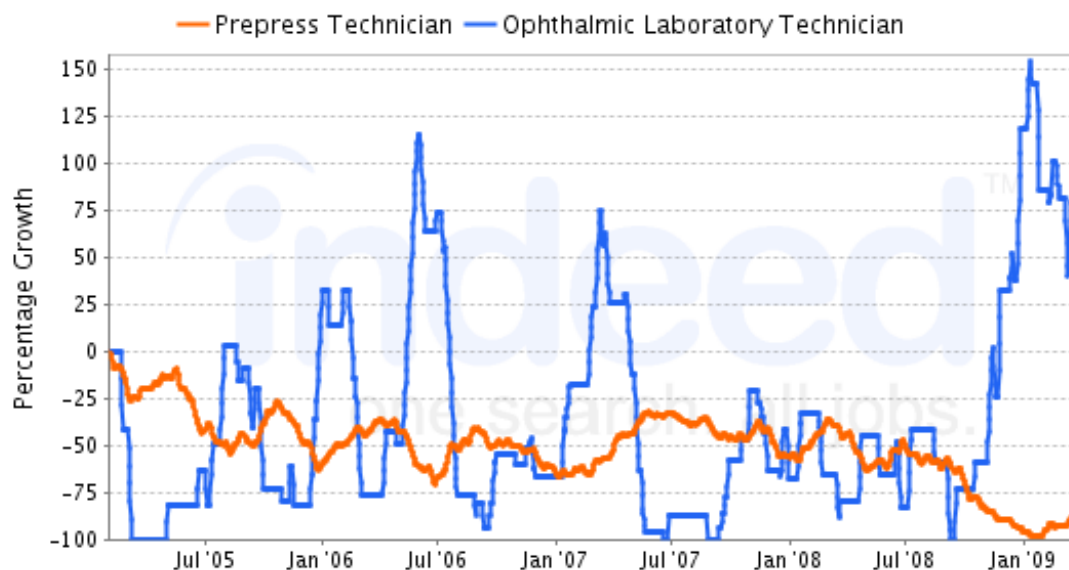
### National Job Posting Trends

Trend for Prepress Technicians and Workers

Trend for  
Ophthalmic  
Laboratory  
Technicians



### Job Trends from Indeed.com



Data from [Indeed](http://Indeed.com)

### Recommended Programs

#### Optometric/Ophthalmic Laboratory Technician

Ophthalmic Laboratory Technology/Technician. A program that prepares individuals, under the supervision of ophthalmologists and optometrists, to cut, grind, edge, and finish corrective lenses and to fabricate eyewear. Includes instruction in optical theory, applied mathematics, lense surfacing and finishing, tinting and coating, impact resistance treatment and testing, frame construction and repair, prescription interpretation, equipment operation and maintenance, follow-up adjustment, record-keeping, and laboratory safety procedures.

No schools available for the program

#### Optical Technician/Assistant

Optometric Technician/Assistant. A program that prepares individuals to assist optometrists in providing patient care, administering examinations and treatments, and performing office administrative functions. Includes instruction in applied anatomy and physiology of the eye, visual testing, patient communication, patient preparation, medications and administration, dispensing and fitting of eyeglasses and contact lenses, record-keeping, and office management skills.

No schools available for the program

#### Ophthalmic Medical Technologist

Ophthalmic Technician/Technologist. A program that prepares individuals to assist ophthalmologists and optometrists in examining and treating patients with vision problems, vision disorders, and eye diseases. Includes instruction in taking patient histories; administering directed treatments and topical medications; diagnostic test procedures and equipment operation; anatomical and functional ocular measurements; patient care and instruction; ophthalmic and surgical equipment maintenance; safety and sterilization procedures; and office administrative procedures.

No schools available for the program

### Maine Statewide Promotion Opportunities for Prepress Technicians and Workers

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-5022.00	Prepress Technicians and Workers	100	3	300	\$30,620.00	\$0.00	-18%	5
43-9031.00	Desktop Publishers	83	3	130	\$32,200.00	\$1,580.00	14%	5



27-1024.00	Graphic Designers	81	4	700	\$34,090.00	\$3,470.00	5%	30
51-4121.07	Solderers and Brazers	79	2	1,610	\$38,030.00	\$7,410.00	7%	49
27-4032.00	Film and Video Editors	79	3	80	\$30,810.00	\$190.00	-4%	2
27-3042.00	Technical Writers	77	4	50	\$46,060.00	\$15,440.00	-8%	2
43-9011.00	Computer Operators	77	3	230	\$33,120.00	\$2,500.00	-30%	4
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	77	2	120	\$36,960.00	\$6,340.00	2%	3
15-1041.00	Computer Support Specialists	75	3	1,670	\$40,200.00	\$9,580.00	5%	61
17-3031.02	Mapping Technicians	75	3	190	\$33,210.00	\$2,590.00	5%	5
23-2091.00	Court Reporters	74	3	0	\$53,640.00	\$23,020.00	0%	0
43-5053.00	Postal Service Mail Sorters, Processors, and Processing Machine Operators	74	2	970	\$41,950.00	\$11,330.00	-12%	10
27-1014.00	Multi-Media Artists and Animators	73	4	70	\$44,630.00	\$14,010.00	9%	10
49-2011.00	Computer, Automated Teller, and Office Machine Repairers	73	3	640	\$32,000.00	\$1,380.00	3%	12
51-2021.00	Coil Winders, Tapers, and Finishers	73	2	90	\$31,910.00	\$1,290.00	-53%	1

### Top Industries for Ophthalmic Laboratory Technicians

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Offices of physicians	621100	11.03%	3,207	3,609	12.56%
Professional and commercial equipment and supplies merchant wholesalers	423400	8.36%	2,431	2,834	16.57%
Commercial and service industry machinery manufacturing	333300	5.50%	1,599	1,402	-12.28%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	0.47%	136	130	-4.26%
General medical and surgical hospitals, public and private	622100	0.46%	134	148	10.71%



Colleges, universities, and professional schools, public and private	611300	0.41%	119	133	11.87%
Management of companies and enterprises	551100	0.22%	63	72	15.26%

### Top Industries for Prepress Technicians and Workers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Printing and related support activities	323100	58.29%	41,328	29,471	-28.69%
Newspaper publishers	511110	15.03%	10,658	8,218	-22.90%
Converted paper product manufacturing	322200	4.22%	2,995	2,262	-24.47%
Advertising and related services	541800	1.62%	1,149	1,167	1.55%
Specialized design services	541400	1.29%	915	1,102	20.43%
Employment services	561300	0.85%	603	687	13.91%
Data processing, hosting, and related services	518200	0.73%	517	629	21.67%
Plastics product manufacturing	326100	0.67%	473	451	-4.60%
Colleges, universities, and professional schools, public and private	611300	0.58%	411	413	0.68%
Management of companies and enterprises	551100	0.53%	373	387	3.75%
Semiconductor and other electronic component manufacturing	334400	0.42%	294	232	-21.33%
Federal government, excluding postal service	919999	0.36%	254	216	-14.92%
Paper and paper product merchant wholesalers	424100	0.34%	244	234	-3.85%
State government, excluding education and hospitals	929200	0.26%	186	164	-11.69%
Manufacturing and reproducing magnetic and optical media	334600	0.22%	153	135	-11.57%